

Federal Operating Permit  
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Vaughan-Bassett Furniture Co.
Facility Name:	Virginia House Furniture Corp. - Plant 2
Facility Location:	357 Bear Creek Road Atkins, VA
Registration Number:	10424
Permit Number:	SWRO10424

Effective Date:                    November 7, 2006

Expiration Date:                November 6, 2011

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Dallas R. Sizemore, Deputy Regional Director

Signature Date:                November 7, 2006

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NSPS Subpart Dc; MACTs A, JJ, DDDD, & DDDDD

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## **I. Facility Information**

### Permittee

Vaughan-Bassett Furniture Co.  
dba Virginia House Furniture Corp.  
300 East Grayson Street  
Galax, Virginia 24333

### Responsible Official

Robert A. Epperson  
Director EHS & Engineering

### Facility

Virginia House Furniture Corporation – Plant 2  
357 Bear Creek Road  
Atkins, Virginia

### Contact Person

Robert A. Epperson  
Director EHS & Engineering  
(276) 236-6161

County-Plant Identification Number: 51-173-00035

**Facility Description:** NAICS 337122 – The company manufactures wood furniture products for dining rooms and bedrooms. Operations include two wood-fired boilers, lumber dry kilns, various woodworking equipment (saws, planers, sanders, etc.), gluing operations, and a spray booth.

## II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment</b>							
ES-1		Bigelow Model 3090 wood-fired boiler - 1954	29.0 million Btu/hr	Zurn multicyclone	CD-1		12/15/04
ES-2		Hurst Model S65-X-384-150 wood-fired boiler - 1999	20.2 million Btu/hr	Zurn multicyclone	CD-18		12/15/04
<b>Lumber Dry Kilns</b>							
ES-4		4 Lumber Dry Kilns	55,000 Bd-ft/2 weeks, each	----	----	----	----
ES-6		1 SII Lumber Dry Kiln (#13) – August, 2004	110,000 Bd-ft/2 weeks	----	----	----	----
<b>Gluing Operations</b>							
ES-7		Veneer Cold Presses; Radio Frequency Presses; Glue Reels		----	----	----	----
<b>Finishing Operations</b>							
SB-12		1 spray booth	Various	filters	----	PM	12/15/04
<b>Woodworking</b>							
ES-5		Various saws, sanders, shapers, etc.		Three Carter Day baghouses	CD-3 - CD-5	PM	12/15/04

\*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

### **III. Fuel Burning Equipment Requirements – Boilers (ES-1 & ES-2)**

#### **A. Limitations**

1. Particulate matter emissions from each of the wood-fired boilers (ES-1 & ES-2) shall be controlled by a multicyclone. The multicyclones shall be provided with adequate access for inspection. An annual inspection shall be conducted on the multicyclones by the permittee to insure structural integrity. Each multicyclone shall be equipped with a device to continuously measure differential pressure drop across the multicyclone. (9 VAC 5-80-10H, 9 VAC 5-50-260, 9 VAC 5-80-110 C, and Condition 3 of the Minor NSR permit issued 12/15/04)
2. Except as specified in this permit, the Hurst wood-fired boiler (ES-2) is to be operated in compliance with federal emissions requirements under 40 CFR 60, Subpart Dc. (9 VAC 5-50-410 and Condition 19 of the Minor NSR permit issued 12/15/04)
3. The approved fuel for the wood-fired boilers (ES-1 & ES-2) is wood. A change in the fuel may require a permit to modify and operate. (9 VAC 5-80-110 and Condition 7 of the Minor NSR permit issued 12/15/04)
4. The Hurst wood-fired boiler (ES-2) shall consume no more than 10,345 tons of wood per year, calculated as the sum of each consecutive 12 month period. (9 VAC 5-80-110 and Condition 8 of the Minor NSR permit issued 12/15/04)
5. Emissions from the operation of the Bigelow wood-fired boiler (ES-1) shall not exceed the limits specified below:

Particulate Matter      0.46 lb/10<sup>6</sup> Btu

Sulfur Dioxide                      76.6 lb/hr  
(9 VAC 5-80-110, 9 VAC 5-40-900, and 9 VAC 5-40-930)

6. Emissions from the operation of the Hurst wood-fired boiler (ES-2) shall not exceed the limits specified below:

Particulate Matter	0.3 lb/10 <sup>6</sup> Btu	6.8 tons/yr
PM-10	0.3 lb/10 <sup>6</sup> Btu	6.8 tons/yr
Sulfur Dioxide		0.8 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )		7.8 tons/yr
Carbon Monoxide		70.3 tons/yr
Volatile Organic Compounds		1.1 tons/yr

(9 VAC 5-50-260, 9 VAC 5-80-110 B, and Condition 11 of the Minor NSR permit issued 12/15/04)

7. Visible Emissions from the Hurst wood-fired boiler (ES-2) stack shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 27 percent opacity. This condition applies at all times except during startup, shutdown, and malfunction.  
(9 VAC 5-50-260, 9 VAC 5-50-410, 9 VAC 5-80-110 K, and Condition 15 of the Minor NSR permit issued 12/15/04)
8. Visible Emissions from the Bigelow wood-fired boiler (ES-1) stack shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity. This condition applies at all times except during startup, shutdown, and malfunction.  
(9 VAC 5-50-20, 9 VAC 5-50-80, and 9 VAC 5-80-110)
9. Boiler emissions shall be minimized by proper operation and maintenance of the units and control devices. The permittee shall have available written operating procedures for the affected facility and related air pollution control equipment. Boiler operators shall be trained in the proper operation of all such equipment and shall be familiar with the written operating procedures. These procedures shall be based on the manufacturer's recommendations at minimum. The permittee shall maintain records of training provided including names of trainees, date of training and nature of training. All records required by this condition shall be kept on site and made available for inspection by the DEQ.  
(9 VAC 5-80-110 C, 9 VAC 5-170-160, and Condition 27 of the Minor NSR permit issued 12/15/04)

**B. Monitoring**

The permittee shall perform a visible emission observation on the wood-fired boiler (ES-1 and ES-2) stacks once each week during normal facility operations. Each visible emissions observation shall be performed for a sufficient period of time to identify the presence of visible emissions. If visible emissions do not appear to exceed 10% opacity, no action shall be required. However, if the observed visible emissions appear to exceed 10% opacity, a visible emissions evaluation (VEE) shall be conducted using 40 CFR Part 60, Appendix A, Method 9 for a period not less than six minutes. If the opacity average exceeds 20%, modifications and/or repairs shall be performed to correct the problem. If such corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted for a period of at least 18 minutes to determine compliance with the opacity limit. The visible emissions observer shall be Method 9 certified.

(9 VAC 5-80-110 K)

**C. Recordkeeping**

Emission monitoring and recordkeeping not otherwise required by this permit shall consist of the following fuel consumption and operating data:

1. Amount of wood combusted in each wood-fired boiler (ES-1 & ES-2) on a monthly, and annual basis. Fuel consumption is calculated as the sum of each consecutive 12 month period.
2. Hourly, monthly, and annual emissions estimates from the Bigelow boiler (ES-1) based on approved emission factors. Hourly emissions shall be estimated by dividing the monthly emissions by the hours of operation for each unit.
3. Monthly, and annual emissions estimates from the Hurst boiler (ES-2) based on approved emission factors.
4. Hours of operation of the Bigelow boiler (ES-1).
5. Results of the weekly VEEs and annual multicyclone inspections to include at a minimum, the date, time, unit identification, results of the observation, name of observer, and corrective actions taken.

The content of and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110 F, and Condition 20 of the Minor NSR permit issued 12/15/04)



**D. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30 and 9 VAC 5-80-110)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
NO <sub>x</sub>	EPA Method 7
SO <sub>2</sub>	EPA Method 6
CO	EPA Method 10
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

**IV. Woodworking Equipment Requirements – (ES-5)**

**A. Limitations**

1. Particulate emissions from the woodworking equipment (ES-5) shall be controlled by three fabric filters. The fabric filters shall be provided with adequate access for inspection. Each fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The devices shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order.  
(9 VAC 5-50-260, 9 VAC 5-80-110 C, and Condition 4 of the Minor NSR permit issued 12/15/04)
2. A fabric filter or a completely enclosed transfer system shall control all subsequent transfer of the collected material from the fabric filters.  
(9 VAC 5-50-260, 9 VAC 5-80-110 C and Condition 5 of the Minor NSR permit issued 12/15/04)
3. Visible emissions from each fabric filter exhaust shall not exceed 5% opacity as determined by EPA Method 9 (40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9 VAC 5-50-260, 9 VAC 5-80-110 K, and Condition 16 of the Minor NSR permit issued 12/15/04)

4. Visible emissions from any fugitive emission points shall not exceed 10% opacity as determined by EPA Method 9 (40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9 VAC 5-50-260, 9 VAC 5-80-110 K, and Condition 17 of the Minor NSR permit issued 12/15/04)
5. Emissions from the operation of the woodworking equipment (ES-5) shall not exceed the limits specified below:

Particulate Matter	0.01 gr/dscf	94.6 tons/yr
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PM-10	0.01 gr/dscf	94.6 tons/yr
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(9 VAC 5-50-260, 9 VAC 5-80-110 B, and Condition 12 of the Minor NSR permit issued 12/15/04)

#### **B. Monitoring and Recordkeeping**

1. The permittee shall perform a visible emission observation on each baghouse exhaust once each week during normal facility operations. Each visible emissions observation shall be performed for a sufficient period of time to identify the presence of visible emissions. If no visible emissions are observed, no action shall be required. However, if visible emissions are observed, a visible emissions evaluation (VEE) shall be conducted using 40 CFR Part 60, Appendix A, Method 9 for a period not less than six minutes. If the opacity average exceeds 5%, modifications and/or repairs shall be performed to correct the problem. If such corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted for a period of at least 18 minutes to determine compliance with the opacity limit. The visible emissions observer shall be Method 9 certified.  
(9 VAC 5-80-110 K)

2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

Results of the weekly visible emission observations to include at a minimum, the date, time, unit identification, results of the observation, name of observer, and corrective actions taken.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 F)

3. Compliance Assurance Monitoring (CAM) Provisions:
  - a. The permittee shall monitor, operate, calibrate and maintain baghouses CD-1 – CD-4 controlling woodworking operations according to the following:

<b>Monitoring, Frequency, Records</b>	<b>Performance Criteria</b>	<b>Indicator Range; Averaging Period</b>
Weekly external baghouse inspections on each baghouse, with results recorded weekly.	External baghouse inspection by a qualified employee with at least one year of experience in maintenance of mechanical equipment.	Observation of condition of baghouse exterior and condition of ductwork.
Internal baghouse inspections, annual or when triggered by pressure drop measurements outside appropriate range.	Internal baghouse inspection by a qualified employee with at least one year of experience in maintenance of mechanical equipment.	Air flow restrictions affecting proper operation of baghouse.
Weekly pressure drop monitoring, with results recorded weekly.	Monitored by a qualified employee with at least one year of experience in maintenance of mechanical equipment.	Pressure Drop greater than 1" water column and less than 6" water column.

- b. The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.  
(9 VAC 5-80-490 E and 40 CFR 64.6 (c))
- c. Except for, as applicable, associated repairs and required quality assurance or control activities, the permittee shall collect data at all required intervals when the baghouses are operating. Data recorded during repairs and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system.  
(9 VAC 5-80-490 E and 40 CFR 64.7(c))
- d. Upon detecting an excursion or exceedance, the permittee shall restore operation of the baghouse to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.  
(9 VAC 5-80-490 E and 40 CFR 64.7 (d)(1))

- e. Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.  
(9 VAC 5-80-490 E and 40 CFR 64.7(d)(2))
- f. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Southwest Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.  
(9 VAC 5-80-490 E and 40 CFR 64.7(e))
- g. If the total number of excursions for the baghouses exceeds 6 for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
  - (1) Improved preventative maintenance practices;
  - (2) Process operation changes;
  - (3) Appropriate improvements to control methods;
  - (4) Other steps appropriate to correct control performance; and
  - (5) More frequent or improved monitoring.  
(9 VAC 5-80-490 E and 40 CFR 64.8(a) and (b))

**C. Recordkeeping**

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

1. Annual throughput of lumber, calculated monthly as the sum of each consecutive twelve (12) month period.
2. Results of the weekly visible emission observations to include at a minimum, the date, time, unit identification, results of the observation, name of observer, and corrective actions taken.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 F)

**D. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30 and 9 VAC 5-80-110)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
PM/PM-10	EPA Method 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

**V. Lumber Dry Kiln Requirements – (ES-4 & ES-6)**

**A. Recordkeeping**

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

- a. Annual throughput of lumber to the kilns, calculated monthly as the sum of each consecutive twelve (12) month period.
- b. Annual VOC emissions determinations, calculated monthly as the sum of each consecutive twelve (12) month period, using approved emission factors for hardwood and softwood.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.  
(9 VAC 5-80-110)

**B. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30 and 9 VAC 5-80-110)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a

(9 VAC 5-80-110)

**VI. Gluing Operation Requirements – (ES-7)**

**A. Monitoring and Recordkeeping**

The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

1. Monthly and annual material balance for the gluing operations, including the consumption of glues and the emissions of VOC. Annual emissions shall be calculated as the sum of each consecutive 12 month period.
2. MSDS, consumer product data sheets, or similar information on each glue used, indicating VOC content.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.  
(9 VAC 5-50-50 and 9 VAC 5-80-110 F)

**B. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30 and 9 VAC 5-80-110)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
VOC Content	EPA Methods 24, 24a

(9 VAC 5-80-110)

**VII. Furniture Finishing Requirements – (SB-12)**

**A. Limitations**

1. Particulate matter emissions from spray booth SB-12 shall be controlled by paper filters or equivalent. The filters shall be provided with adequate access for inspection.  
(9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-80-110 C and Condition 6 of the Minor NSR permit issued 12/15/04)
2. Spray booth SB-12 shall consume no more than 19,607 gallons per year of Woodsize Concentrate or equivalent coating, calculated monthly as the sum of each consecutive 12 month period.  
(9 VAC 5-80-1180, 9 VAC 5-80-110 B, and Condition 9 of the Minor NSR permit issued 12/15/04)
3. Visible emissions from spray booth SB-12 shall not exceed 5% opacity as determined by EPA Method 9 (40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9 VAC 5-50-260, 9 VAC 5-50-20, 9 VAC 5-80-110 K and Condition 18 of the Minor NSR permit issued 12/15/04)

4. Emissions from the operation of spray booth SB-12 shall not exceed the limits specified below:

Volatile Organic Compounds	0.2 lb/hr	0.5 tons/yr
PM10	0.7 lb/hr	1.7 tons/yr

Annual emissions shall be calculated as the sum of each consecutive 12 month period.  
(9 VAC 5-50-260, 9 VAC 5-80-110 B, and Condition 13 of the Minor NSR permit issued 12/15/04)

**B. Monitoring**

The permittee shall perform a visible emission observation on the exhausts from spray booth SB-12 once each week during normal facility operations. Each visible emissions observation shall be performed for a sufficient period of time to identify the presence of visible emissions. If no visible emissions are observed, no action shall be required. However, if visible emissions are observed, a visible emissions evaluation (VEE) shall be conducted using 40 CFR Part 60, Appendix A, Method 9 for a period not less than six minutes. If the opacity average exceeds 5%, modifications and/or repairs shall be performed to correct the problem. If such corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted for a period of at least 18 minutes to determine compliance with the opacity limit. The visible emissions observer shall be Method 9 certified.  
(9 VAC 5-80-110 K)

**C. Recordkeeping**

The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

1. A monthly and annual material balance for spray booth SB-12, including the emissions of PM10 and VOC. Annual emissions shall be calculated as the sum of each consecutive 12 month period. Hourly emissions shall be calculated by dividing monthly emissions by hours of operation. PM10 emissions estimates will account for particulate transfer efficiency and filter collection efficiency.
2. The yearly throughput of Woodsize Concentrate or equivalent, calculated as the sum of each consecutive 12 month period.
3. The number of hours of operation of spray booth SB-12.
4. Results of the weekly VEEs to include at a minimum, the date, time, unit identification, results of the observation, name of observer, and corrective actions taken.



These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110 F and Condition 20 of the Minor NSR permit issued 12/15/04)

#### **D. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30 and 9 VAC 5-80-110)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
VOC Content	EPA Methods 24, 24a
PM/PM-10	EPA Method 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

#### **VIII. MACT Conditions**

Except as specified in this permit, the facility is to be operated in compliance with Federal requirements under 40 CFR 63, Subparts A, JJ, DDDD, and DDDDD. Subpart JJ (National Emission Standards for Furniture Manufacturing Operations) is applicable to the finishing operations. Subpart JJ applicable requirements are identified below. Subpart DDDD (National Emission Standards for Plywood and Composite Wood Products) is an applicable requirement based on the operation of lumber dry kilns and wood panel and veneer gluing operations. There are limited Subpart DDDD requirements that apply as indicated below. Subpart DDDDD (National Emission Standards for Boilers and Process Heaters) is applicable based on the operation of two facility boilers. There are no applicable requirements for the boilers, since both are firetube units.

(9 VAC 5-60-20, 40 CFR 63.800, 40 CFR 63 Subpart A, 40 CFR 63.2231(a), and 40 CFR 63.7490(a))

### **MACT DDDD Requirements**

Except where this permit is more restrictive, on October 1, 2007, the permittee, in accordance with 40 CFR 63 Subpart DDDD – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products, shall record and retain all information necessary to demonstrate that the operation of the lumber dry kilns and gluing operations are in compliance with 40 CFR 63 Subpart DDDD. These requirements include, but are not limited to, the following:

- a. Maintenance records in accordance with 40 CFR 63.2250, 40 CFR 63.6(e)(1)(i), and 40 CFR 63.10(b).
- b. Records of all notifications and reports submitted to comply with 40 CFR 63 Subpart DDDD as required by 40 CFR 63.2282(a)(1).

Each record must be kept for a minimum of 5 years by the permittee as specified in 40 CFR 63.2283(b). Records must be maintained onsite for a minimum of 2 years as required by 40 CFR 63.2283(c).  
(9 VAC 5-60-90, 9 VAC 5-60-100, 9 VAC 5-80-110, and 40 CFR 63 Subpart DDDD)

### **MACT JJ Requirements**

#### **B. Emission Standard**

1. Volatile Hazardous Air Pollutant (VHAP) emissions from the facility shall not exceed the following limits;
  - a. For finishing operations use any of the following methods;
    - (1) Achieve a weighted average VHAP content across all coatings of 1.0 lb VHAP/lb solids, as applied;
    - (2) Use compliant finishing materials that meet the following specifications:
      - (a) Each sealer and topcoat has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
      - (b) Each stain has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
      - (c) Each thinner contains no more than 10.0 percent VHAP by weight except where excluded by (5) of this sub- section;

- (d) Each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
  - (e) Each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 1.0 lb VHAP/lb solids and a thinner containing no more than 3.0 percent VHAP by weight;
  - (3) Use a control device which must operate at an efficiency that is equivalent to no greater than 1.0 lb of VHAP being emitted per lb of solids used;
  - (4) Use any combination of averaging, compliant coatings, and control device such that no greater than 1.0 lb of VHAP being emitted per lb of solids used;
  - b. For cleaning operations strippable spray booth coatings shall be used that contain no more than 0.8 lb VOC/lb solids, as applied;
  - c. For contact adhesive operations use either of the following methods;
    - (1) Compliant contact adhesives shall be used based on the following criteria;
      - (a) For aerosol adhesives, as well as hot melt, PVA, and urea-formaldehyde adhesives, and for contact adhesives applied to nonporous substrates there is no limit on the VHAP content of these adhesives;
      - (b) For foam adhesives used in products that meet flammability requirements the VHAP content can be no more than 1.8 lb VHAP/lb solids, as applied;
      - (c) For all other contact adhesives the VHAP content can be no more than 1.0 lb VHAP/lb solids, as applied;
    - (2) Use a control device which must operate at an efficiency that is equivalent to no greater than 1.0 lb of VHAP being emitted per lb of solids used.
- (9 VAC 5-60-20 and 40 CFR 63.802)

**C. Continuous Compliance**

Continuous compliance with the VHAP emissions limits shall be determined as follows:  
(See Conditions VIII.I and VIII.J for content and timing of report submissions and signature requirements)

- a. For finishing operations when averaging is being used to show continuous compliance, the permittee shall submit the results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report. The compliance certification

shall state that the value of (E), as calculated by Equation 1, is no greater than 1.0. The facility is in violation of the standard if E is greater than 1.0 for any month. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.

$$E = (M_{c1}C_{c1} + M_{c2}C_{c2} + \dots + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + \dots + S_nW_n) / (M_{c1} + M_{c2} + \dots + M_{cn})$$

.....Equation 1

- E = the emission limit achieved by an emission point or a set of emission points, in lb VHAP/lb solids.
- M<sub>c</sub> = the mass of solids in a finishing material or coating (c) used monthly, including exempt finishing materials and coatings, lb solids/month.
- C<sub>c</sub> = the VHAP content of a finishing material or coating (c), in pounds of VHAP per pound of coating solids.
- S = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials or coatings.
- W = the amount of solvent, in pounds, added to finishing materials and coatings during the monthly averaging period.

The Emission Limit (E in lb VHAP / lb solids) equals the sum, for all finishing materials and coatings, of the mass of solids in each material used within that month (M<sub>c</sub> in lb solids / month) multiplied by the VHAP content in each material (C<sub>c</sub> in lb VHAP / lb solids) plus the sum, for all solvents, of the mass of solvent used monthly (W in lb solvent / month) multiplied by the weight fraction of VHAP in the solvent (S in lb VHAP / lb solvent), with this total being divided by the sum, for all finishing materials and coatings, of the mass of solids in each finishing material and coating used within that month (M<sub>c</sub> in lb solids / month).

- b. For finishing operations when compliant coatings are being used to show continuous compliance, the permittee shall use compliant coatings and thinners, maintain records that demonstrate the finishing materials and thinners are compliant, and submit a compliance certification with the semiannual report which states that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as stated in Condition VIII.B, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. The facility is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.
- c. For finishing operations when compliant coatings are being used to show continuous compliance and the coatings are being applied using continuous coaters, the permittee shall demonstrate continuous compliance by either of the following:
  - (1) Use compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, use compliant thinners, and submit a compliance certification with the semiannual report

which states that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. The facility is in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.

- (2) Use compliant coatings, as determined by the VHAP content of the coating in the reservoir, use compliant thinners, maintain a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added, maintain records of solvent additions, and submit a compliance certification with the semiannual report which states that compliant coatings, as determined by the VHAP content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period. The facility is in violation of the standard when a sample of the as-applied coating exceeds the applicable limit, as determined using EPA Method 311, or the viscosity of the coating in the reservoir is less than the viscosity of the initial coating.
- d. For contact adhesive operations when compliant adhesives are being used to show initial compliance, the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard.
- e. For strippable spray booth coatings, the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard.
- f. For work practice standards, the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that the permittee is required to implement the provisions of the plan, each failure to implement an obligation under

the plan during any particular day is a violation and the Administrator may require the permittee to modify the plan (see Condition VIII.G.a).

(9 VAC 5-60-20, 40 CFR 63.804(g), and 40 CFR 63.8)

**D. Testing**

If compliance testing is conducted the tests shall be conducted using the test methods and procedures as specified in 40 CFR 63.805 of Subpart JJ.

(9 VAC 5-60-100, 40 CFR 63.805)

**E. Submittals**

All submittals to the Administrator shall be sent to the DEQ Southwest Regional Office and to EPA Region III at the following address:

U.S. EPA Region III  
Air Protection Division (3AP00)  
ATTN: Wood Furniture NESHAP Coordinator  
1650 Arch Street  
Philadelphia, PA 19103-2029

(9 VAC 5-60-100 and 40 CFR 63.13)

**F. Operation and Maintenance**

The permittee shall meet the following operation and maintenance requirements:

- a. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.
- b. Malfunctions shall be corrected as soon as practicable after their occurrence.
- c. Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.
- d. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(9 VAC 5-60-100 and 40 CFR 63.6(e))

**G. Work Practice Standards**

The permittee shall develop and implement the following work practice standards:

- a. Work practice implementation plan - The permittee shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for the finishing and gluing operations and addresses each of the work practice standards presented in Conditions b through l that follow. The plan shall be developed no more than 60 days after the compliance date. The written work practice implementation plan shall be available for inspection by the Administrator upon request. If the Administrator determines that the work practice implementation plan does not adequately address each of the topics specified in §63.803 of Subpart JJ or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator may require the permittee to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.
- b. Operator training course - The permittee shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment in these operations, or implementation of the requirements of Subpart JJ. All new personnel shall be trained upon hiring. All existing personnel shall be trained within six months of the compliance date. All personnel shall be given refresher training annually. The permittee shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:
  - (1) A list of all current personnel by name and job description that are required to be trained;
  - (2) An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
  - (3) Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
  - (4) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.
- c. Inspection and maintenance plan - The permittee shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:

- (1) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;
  - (2) An inspection schedule;
  - (3) Methods for documenting the date and results of each inspection and any repairs that were made;
  - (4) The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
    - (a) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
    - (b) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.
- d. Cleaning and washoff solvent accounting system - The permittee shall develop an organic HAP solvent accounting form to record:
- (1) The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in §63.801 of Subpart JJ;
  - (2) The number of pieces washed off, and the reason for the washoff; and
  - (3) The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- e. Chemical composition of cleaning and washoff solvents - The permittee shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of Subpart JJ (see attached), in concentrations subject to MSDS reporting as required by OSHA.
- f. Spray booth cleaning - The permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the permittee shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.



- g. Storage requirements - The permittee shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.
- h. Application equipment requirements - The permittee shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:
  - (1) To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;
  - (2) For touchup and repair under the following conditions:
    - (a) The touchup and repair occurs after completion of the finishing operation;  
or
    - (b) The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons.
  - (3) When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;
  - (4) When emissions from the finishing application station are directed to a control device;
  - (5) The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or
  - (6) The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. The permittee shall demonstrate technical or economic infeasibility by submitting to the Administrator a videotape, a technical report, or other documentation that supports the permittee's claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the permittee's claim of technical or economic infeasibility:
    - (a) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or
    - (b) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.

- i. Line cleaning - The permittee shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.
- j. Gun cleaning - The permittee shall collect all organic HAP solvent used to clean spray guns into a normally closed container.
- k. Washoff operations - The permittee shall control emissions from washoff operations by:
  - (1) Using normally closed tanks for washoff; and
  - (2) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.
- l. Formulation assessment plan for finishing operations - The permittee shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:
  - (1) Identifies VHAP from the list presented in Table 5 of Subpart JJ (see attached) that are being used in finishing operations;
  - (2) Establishes a baseline level of usage for each VHAP identified. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified, except for formaldehyde and styrene which shall be determined as specified by §63.803 (l)(2). Sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system. For VHAPs that do not have a baseline, one will be established according to Condition (6) below.
  - (3) Tracks the annual usage of each VHAP identified that is present in amounts subject to MSDS reporting as required by OSHA.
  - (4) If the annual usage of the VHAP identified exceeds its baseline level, then the permittee of the facility shall provide a written notification to the Director, Southwest Regional Office and the Administrator that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:
    - (a) The exceedance is no more than 15.0 percent above the baseline level;
    - (b) Usage of the VHAP is below the de minimis level presented in Table 5 for that VHAP;

- (c) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
  - (d) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 lb VOC/lb solids, as applied.
- (5) If none of the explanations listed in Condition (4) above is the reason for the increase, the permittee shall confer with the Director, Southwest Regional Office and the Administrator to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the Director, Southwest Regional Office and the Administrator and owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.
- (6) If the facility uses a VHAP of potential concern listed in Table 6 of Subpart JJ for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level provided in that same table. The permittee shall track the annual usage of each VHAP of potential concern identified that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the de minimis level listed in Table 6 of Subpart JJ for that chemical, then the permittee shall provide an explanation to the Director, Southwest Regional Office and the Administrator that documents the reason for exceedance of the de minimis level. If the explanation is not one of those listed in Condition (4) above, the affected source shall follow the procedures established in Condition (5) above.

(9 VAC 5-60-100 and 40 CFR 63.803(a)-(l))

## **H. Recordkeeping**

The permittee shall maintain records of the following:

- a. For emission limit purposes the permittee shall maintain the following:
  - (1) A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in Subpart JJ;

- (2) The VHAP content, in lb VHAP/lb solids, as applied, of each finishing material and contact adhesive subject to the emission limits in Subpart JJ; and
  - (3) The VOC content, in lb VOC/lb solids, as applied, of each strippable booth coating subject to the emission limits in Subpart JJ.
- b. Following the averaging method the permittee shall maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1.
- c. Following the continuous coating operations, where viscosity is being used to determine compliance, the permittee shall maintain the records required by Condition a above as well as the following:
- (1) Solvent and coating additions to the continuous coater reservoir;
  - (2) Viscosity measurements; and
  - (3) Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance.
- d. The permittee shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
- (1) Records demonstrating that the operator training program required by Condition VIII.G.b is in place;
  - (2) Records collected in accordance with the inspection and maintenance plan required by Condition VIII.G.c;
  - (3) Records associated with the cleaning solvent accounting system required by Condition VIII.G.d;
  - (4) Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period required by Condition VIII.G.h;
  - (5) Records associated with the formulation assessment plan required by Condition VIII.G.i; and

- (6) Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
- e. The permittee shall maintain records of the compliance certifications submitted for each semiannual period following the compliance date.
- f. The permittee shall maintain records of all other information submitted with the compliance status report and the semiannual reports.
- g. The permittee shall maintain files of all information (including all reports and notifications) required, recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(9 VAC 5-60-100 and 40 CFR 63.806 & 63.10(b)(1))

#### **I. Notification of Compliance**

Each time a notification of compliance status is required, the permittee shall submit to the appropriate Director, Southwest Regional Office and/or the Administrator a notification of compliance status, signed by a responsible official of the company that owns or operates the facility who shall certify its accuracy, attesting to whether the source has complied with Subpart JJ. The notification shall list:

- a. The methods that were used to determine compliance;
- b. The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
- c. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
- d. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified;
- e. An analysis demonstrating whether the facility is a major source or an area source (using the emissions data generated for this notification);
- f. A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and

- g. A statement by the permittee as to whether the facility has complied with Subpart JJ as expressed in this permit.

(9 VAC 5-60-100 and 40 CFR 63.9(h))

## **J. Reporting**

Reporting not otherwise required by this permit shall consist of the following:

- a. The permittee when demonstrating continuous compliance shall submit a report covering the previous 6 months of wood furniture manufacturing operations:
- (1) The time periods to be addressed are January 1 to June 30 and July 1 to December 31 of each calendar year. The respective reports shall be submitted no later than March 1 and September 1 of each calendar year.
  - (2) The semiannual reports shall include the information required by Condition VIII.C, a statement of whether the facility was in compliance or noncompliance, and, if the facility was in noncompliance, the measures taken to bring the facility into compliance.
  - (3) The frequency of the reports required by Condition 1 above shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.
- b. The permittee, when required to provide a written notification by Condition VIII.G.l(4)(d) for exceedance of a baseline level, shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

(9 VAC 5-60-100 and 40 CFR 63.807 & 63.10(d))

## **IX. Insignificant Emission Units**

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation <sup>1</sup> (9 VAC )	Pollutant Emitted (5-80-720 B.)	Rated Capacity ( 5-80-720 C.)
BST-1	Lacquer Bulk Storage Tank	9 VAC 5-80-720 B	VOC	----
BST-2	Sealer Bulk Storage Tank	9 VAC 5-80-720 B	VOC	----
BST-3	Thinner Bulk Storage Tank	9 VAC 5-80-720 B	VOC	----

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

## **X. Permit Shield & Inapplicable Requirements**

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60.110b – 117b	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Applies to storage tanks greater than 75 m <sup>3</sup> (19,789 gallons) capacity. Does not apply to three 4000-gallon storage tanks at the plant.
40 CFR 60.40c - 48c	NSPS Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Does not apply to the Bigelow boiler since it was installed prior to 1989.
40 CFR 63.7480-7575	MACT Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters	The boilers at the facility are fire-tube units, and are defined as small units. Although they are considered affected sources, there are no requirements for such units.
9 VAC 5 Chapter 60, Part II, Article 4	Emission Standards for Toxic Pollutants from Existing Sources	Excluded by 9 VAC 5-60-200 C.4.
9 VAC 5 Chapter 60, Part II, Article 5	Emission Standards for Toxic Pollutants from New Sources	Excluded by 9 VAC 5-60-300 C.4.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.  
(9 VAC 5-80-140)

## **XI. General Conditions**

### **A. Federal Enforceability**

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

### **B. Permit Expiration**

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

### **C. Recordkeeping and Reporting**

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements.



- b. The date(s) analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses.
  - f. The operating conditions existing at the time of sampling or measurement.  
(9 VAC 5-80-110 F)
2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.  
(9 VAC 5-80-110 F)
3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
  - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
    - (1) Exceedance of emissions limitations or operational restrictions;
    - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
    - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
  - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."  
(9 VAC 5-80-110 F)

**D. Annual Compliance Certification**

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- b. The identification of each term or condition of the permit that is the basis of the certification.
- c. The compliance status.
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- f. Such other facts as the permit may require to determine the compliance status of the source.
- g. One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)  
U. S. Environmental Protection Agency, Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

**E. Permit Deviation Reporting**

The permittee shall notify the Director, Southwest Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3. of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

**F. Failure/Malfunction Reporting**

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Southwest Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Southwest Regional Office.

(9 VAC 5-20-180 C)

**G. Severability**

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

**H. Duty to Comply**

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

**I. Need to Halt or Reduce Activity not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

**J. Permit Modification**

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

**K. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-110 G.5)

**L. Duty to Submit Information**

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

(9 VAC 5-80-110 K.1)

**M. Duty to Pay Permit Fees**

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

**N. Fugitive Dust Emission Standards**

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

**O. Startup, Shutdown, and Malfunction**

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

**P. Alternative Operating Scenarios**

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

**Q. Inspection and Entry Requirements**

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- d. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

**R. Reopening For Cause**

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

**S. Permit Availability**

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

**T. Transfer of Permits**

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.  
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)

**U. Malfunction as an Affirmative Defense**

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
  - b. The permitted facility was at the time being properly operated.
  - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
  - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit

requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

- e. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- f. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

**V. Permit Revocation or Termination for Cause**

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

**W. Duty to Supplement or Correct Application**

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

**X. Stratospheric Ozone Protection**

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

**Y. Asbestos Requirements**

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)



**Z. Accidental Release Prevention**

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.  
(40 CFR Part 68)

**AA. Changes to Permits for Emissions Trading**

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.  
(9 VAC 5-80-110 I)

**BB. Emissions Trading**

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)